



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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April 20, 2015

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Natural Resources Conservation Service
100 W. Capitol Street, Suite 1321
Jackson, Mississippi 39269

**DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
(DSEIS) For the LONG BEACH WATERSHED
CEQ Number: 20150049**

Dear Mr. Readus:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Draft Supplemental Environmental Impact Statement (DSEIS) for the Long Beach Watershed in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act.

Background: The Long Beach Watershed DSEIS is a supplement to the original environmental impact statement (1989) that includes updated information for the channel modification of Canal 1. The DSEIS also includes a supplemental watershed agreement No. 2. According to NRCS, the project sponsors are updating the Environmental Impact Statement in order to identify the impacts of modifying the channel to reduce flooding to urban areas which include 121 residences and businesses along the canal. The proposed modifications include 3.8 miles of widening, side-sloping and grading of the earth-lined channel, and 0.2 miles of rock riprap lined channel. The Long Beach Watershed shares a common border with the Turkey Creek Watershed.

EPA Comments and Recommendations:

Floodplain:

- **Comment:** EPA is concerned that decreasing the size of the floodplain as defined by FEMA flood plains and flood insurance and FIS maps invites encroachment of development which will only exacerbate existing flooding issues.

Recommendation: Preserving undeveloped areas along the canal and allowing those areas to flood, similar to the approach that is being taken in Turkey Creek, provides a step toward a more long-term solution.

- **Comment:** The DSEIS proposes increasing the capacity of the canals which will decrease the floodplain by 150 ft, 450 ft, and 400 ft for the 100-year, 10-year, and 1-year flood events respectively. The flow velocity will also increase by 0.3 ft/s, 0.5 ft/s, and 0.6 ft/s for the 100-year, 10-year, and 1-year flood events respectively. According to the DSEIS, FEMA floodplain maps and the Flood insurance maps will be modified after the channel improvements are complete.

Recommendation: EPA believes that this action may result in more development around the canal in the future. Should this occur, then larger canals may be needed in the future. A more sustainable solution to address future watershed issues should be considered similar to what is being considered in Turkey Creek.

- **Comment:** The Long Beach Watershed shares a common boundary with the Turkey Creek Watershed. According to information in the DSEIS, during time of peak flows, the vast majority of any overflow from Turkey Creek will be transported downstream by Canal #2-3, and some of the Turkey Creek floodwater breaks over the watershed boundary along 28th Street and flows into the Long Beach Watershed. By letter dated 1/2/09, EPA requested that the DSEIS include an analysis of how the proposed project could (or will) serve as a diversion canal for any adjacent streams. EPA particularly stated the analysis should investigate impacts to the drainage conditions within the Turkey Creek basin. The DSEIS discusses the effects of the Turkey Creek overflow on Canal #1 and Canal #2-3, but it does not appear to specifically discuss the impacts of the project to the drainage conditions within the Turkey Creek basin.

Recommendation: EPA would like to reiterate its previous request for an analysis of the impacts of the proposed project to the drainage conditions within the Turkey Creek basin. EPA requests that the Final SEIS indicate how much overflow from Turkey Creek is entering the Long Beach Watershed, and whether the improvements of Canal #1 will in turn affect the drainage of Turkey Creek (e.g., increase the quantity of overflow from Turkey Creek).

- **Comment:** According to the DSEIS, the survey conducted identified 2.72 acres of palustrine wetlands, 2.89 acres of lacustrine wetlands, and 5.26 miles of jurisdictional waters within the project area. The only permanent impact would be 0.01 acres of palustrine wetland that would be lost to the channel widening. The project will involve clearing a total of 61 acres which would be considered temporary since they will be replanting the 61 acres and an additional 58 acres after the project is completed. Revegetation may be affected due to anaerobic soil conditions and any newly planted trees may take a while to grow back.

Recommendation: EPA notes that although there are only 0.01 acres of permanent impacts, there are substantial impacts to the riparian area which may include clearing of wetlands. Clearing should be minimized as much as possible both for surface roughness and bank stabilization. Also, efforts to mitigate/address some of the temporal loss should be considered.

- **Turkey Creek Overflow:** According to the DSEIS, Canal No. 1 and Canal No. 2-3 are hydraulically connected and share a common 100-year floodplain within this reach. Downstream of this common floodplain the two canals separate. The Canal No. 1 stream reach is largely located within the U.S. Naval Reservation at Gulfport. During time of peak flows, some of the Turkey Creek floodwater crosses over the watershed boundary along 28th Street and flows into the Long Beach Watershed. The effect of Turkey Creek overflow on Canal #1 is a concern to the Long Beach residents downstream. The quantity and timing of any overflow from Turkey Creek down Canal No. 1 will affect both the existing function of the channel as well as the design of the modified channel. To reduce flooding to residents and businesses along Canal #1, the NRCS is proposing to modify the channel to carry a larger capacity of runoff.

Comment: EPA notes that the improvements to Canal 2 in Turkey Creek have been implemented. However, it is unclear what impact these improvements have had on potential overflows to Long Beach Residents. The Final SEIS should include this information.

Impacts of Overflows

- The DSEIS States that the channel modifications is designed to reduce flooding to 121 residences and business along the canal by modifying the channel to carry a larger capacity of runoff. The DSEIS indicates that the channel improvements would result in a decrease in storm elevations by 0.9 ft, 1.0 ft, and 1.3 ft for the 100-year, 10-year, and 1-year flood events respectively. However, downstream from the channel improvements, storm elevations will increase by 0.35 ft for the 25-yr to 100-yr storm and 0.57 ft for the 1-yr to 10-yr storm. Velocity would also increase by 0.19 ft/s for the 1-yr to 10-yr storm. As a result, two residential homes will experience increased flooding. Currently the homes are not inundated by the 100-yr storm but after the channel improvements are completed, these homes will be inundated by 0.13 ft to 0.61 ft of water. The homes currently flood during the 500-yr event but after the project is completed, flooding would increase by 0.19 ft.

Recommendation: The DSEIS notes the potential residential impacts, but does not discuss efforts to compensate or offset impacts to these residents.

According to the DSEIS, improvements to Canal 2-3 that were completed in 2012 have provided reduced flooding to structures with no known negative impacts to the surrounding environment.

Comment: The Final SEIS should provide information or data that supports the reduction in flooding to structures and the lack of adverse impacts to the environment. This information would be helpful because local residents and others remain concerned about potential flooding in their communities and it may further support the benefits of the proposed modification.

- **Compensatory Mitigation Comment:** Compensation for impacts to fish and wildlife habitat include planting an additional 58 acres of trees on suitable cleared land within the watershed. However, there is no description of what is considered suitability.

Recommendation: It is recommended that the Final SEIS describe or explain what is considered “suitable cleared land” as it relates to the compensatory mitigation activity (for example, is it based on certain zoning requirements/restrictions, proximity to Canal #1, etc.). It is also recommended that the Final SEIS indicate the estimated amount of “suitable cleared land” currently available in the watershed.

Other Comments or Clarifications:

Comment: In order to minimize the effects of increased turbidity levels, sediment decreasing construction techniques will be implemented, including: (a) sediment traps at the lower end of the channel; (b) channel side slopes constructed at 3:1; and (c) vegetation of spoil, berm, and channel slopes. However, the DSEIS contains discrepancies regarding the distance that spoil berm and channel slopes will be vegetated. Some pages of the DSEIS (e.g., Pages 21 and 31) state that spoil berm and channel slopes will be vegetated every 1,000 feet of construction, but other pages (e.g., Pages 3, 23, and 33) state that spoil berm and channel slopes will be vegetated every 500 feet of construction.

Recommendation: This Final EIS should correct this discrepancy.

- **Comment:** Page 31 of the DSEIS explains that the centerline of some sections of the channel will be realigned in order to avoid impacts to some delineated wetlands. However, this avoidance measure is not included in the "Mitigation" section on Page 33.

Recommendation: Since mitigation features included in the recommended plan incorporate avoidance and minimization of adverse impacts, as well as compensation for unavoidable losses of fish and wildlife habitat, it would be appropriate to also have the avoidance measure identified under the "Mitigation" section, Page 33. For the convenience of the reader, it is recommended that the realignment of the centerline of sections of the channel be identified in the “Mitigation” section (Page 33) as an avoidance measure.

- **Comments:** Some of the Survey data or correspondence appear to be 5-7 years old. (i.e., Cultural Resource Surveys, Fish and Wildlife Survey). Is the information still up-to-date and do the agencies still support the previous findings?

Thank you for the opportunity to review this DSEIS. We rate this document EC-1 Environmental Concerns; We have concerns that the proposed action identifies the potential for impacts to the environment that should be further avoided/minimized and addressed in the Final SEIS. We also strongly agree with the need for a robust monitoring and evaluation program to determine the potential for any adverse impacts from the project.

Please contact Ken Clark of my staff at (404) 562- 8282 if you have any questions or want to discuss our comments further.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz J. Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief
NEPA Program Office